

CLAIMS

WHAT IS CLAIMED IS:

1. A genetically engineered mammalian cell that has been
5 mutated by a process comprising the insertion of a recombinantly
manipulated polynucleotide sequence into a gene in said
genetically engineered mammalian cell wherein said gene is
identifiable as corresponding to at least one of SEQ ID NOS: 1-
341.
- 10 2. The genetically engineered mammalian cell of Claim 1,
wherein said cell is murine.
- 15 3. A cell according to Claim 2, wherein said cell is an
embryonic stem cell.
4. The genetically engineered mammalian cell of Claim 1,
wherein said polynucleotide sequence is present on a viral
vector.
- 20 5. A cell according to Claim 4, wherein said viral vector
is a retroviral vector.
- 25 6. A cell according to Claim 4, wherein said viral vector
additionally comprises regions of targeting DNA that facilitate
gene targeting by homologous recombination.
- 30 7. An isolated murine embryonic stem cell line comprising
an engineered retroviral gene trap vector in at least one gene
comprising a polynucleotide sequence first disclosed in one of
SEQ ID NOS: 1-341.